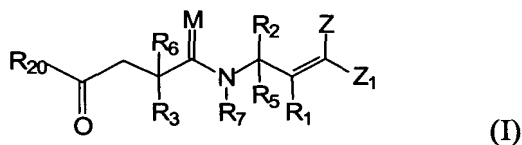


WHAT IS CLAIM IS:

1. At least one compound of the formula (I):

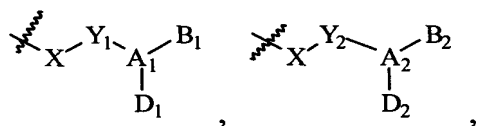


wherein

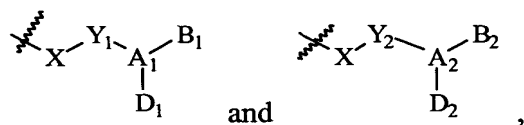
M is O or S;

R₁ is H, F, an alkyl group, OH, SH, or an O-alkyl group;

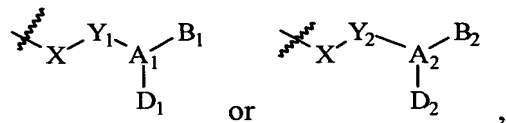
R₂ and R₅ are independently selected from H,



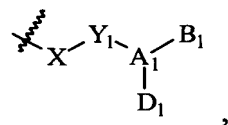
or an alkyl group, wherein said alkyl group is different from



with the proviso that at least one of R₂ or R₅ must be



and wherein, when R₂ or R₅ is



X is =CH or =CF and Y₁ is =CH or =CF,

or X and Y₁ together with Q' form a three-membered ring in which Q' is -C(R₁₀)(R₁₁)- or -O-, X is -CH- or -CF-, and Y₁ is -CH-, -CF-, or -C(alkyl)-, where R₁₀ and R₁₁ independently are H, a halogen, or an alkyl group, or, together with the carbon atom to which they are attached, form a cycloalkyl group or a heterocycloalkyl group,

or X is -CH₂-, -CF₂-, -CHF-, or -S-, and Y₁ is -O-, -S-, -NR₁₂-, -C(R₁₃)(R₁₄)-, -C(O)-, -C(S)-, or -C(CR₁₃R₁₄)-,

wherein R₁₂ is H or alkyl, and R₁₃ and R₁₄ independently are H, F, or an alkyl group, or, together with the atoms to which they are bonded, form a cycloalkyl group or a heterocycloalkyl group;

A₁ is C, CH, CF, S, P, Se, N, NR₁₅, S(O), Se(O), P-OR₁₅, or P-NR₁₅R₁₆,

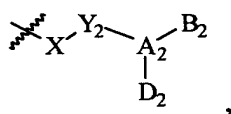
wherein R₁₅ and R₁₆ independently are an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom to which they are bonded, form a heterocycloalkyl group;

D₁ is a moiety with a lone pair of electrons capable of forming a hydrogen bond; and

B₁ is H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR₁₇, -SR₁₇, -NR₁₇R₁₈, -NR₁₉NR₁₇R₁₈, or -NR₁₇OR₁₈,

wherein R₁₇, R₁₈, and R₁₉ independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

and with the provisos that when D_1 is the moiety $\equiv N$ with a lone pair of electrons capable of forming a hydrogen bond, B_1 does not exist; and when A_1 is an sp^3 carbon, B_1 is not $-NR_{17}R_{18}$ when D_1 is the moiety $-NR_{25}R_{26}$ with a lone pair of electrons capable of forming a hydrogen bond, wherein R_{25} and R_{26} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group; and wherein $D_1-A_1-B_1$ optionally forms a nitro group where A_1 is N; and further wherein, when R_2 or R_5 is



X is $=CH$ or $=CF$ and Y_2 is $=C$, $=CH$, or $=CF$,

or X and Y_2 together with Q' form a three-membered ring in which Q' is $-C(R_{10})(R_{11})-$ or $-O-$, X is $-CH-$ or $-CF-$, and Y_2 is $-CH-$, $-CF-$, or $-C(alkyl)-$, where R_{10} and R_{11} independently are H, a halogen, or an alkyl group, or, together with the carbon atom to which they are attached, form a cycloalkyl group or a heterocycloalkyl group,

or X is $-CH_2-$, $-CF_2-$, $-CHF-$, or $-S-$, and Y_2 is $-O-$, $-S-$, $-N(R'_{12})-$, $-C(O)-$, $-C(R'_{13})(R'_{14})-$, $-C(S)-$, or $-C(CR'_{13}R'_{14})-$,

wherein R'_{12} is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, $-OR'_{13}$, $-NR'_{13}R'_{14}$, $-C(O)-R'_{13}$, $-SO_2R'_{13}$, or $-C(S)R'_{13}$, and R'_{13} and R'_{14} , independently are H, F, or an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom to which they

are attached, form a cycloalkyl group or a heterocycloalkyl group;

A₂ is C, CH, CF, S, P, Se, N, NR₁₅, S(O), Se(O), P-OR₁₅, or P-NR₁₅R₁₆, wherein R₁₅ and R₁₆ independently are an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom to which they are bonded, form a heterocycloalkyl group;

D₂ is a moiety with a lone pair of electrons capable of forming a hydrogen bond; and

B₂ is H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR₁₇, -SR₁₇, -NR₁₇R₁₈, -NR₁₉NR₁₇R₁₈, or -NR₁₇OR₁₈,

wherein R₁₇, R₁₈, and R₁₉ independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

and further wherein any combination of Y₂, A₂, B₂, and D₂ optionally can form a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group;

R₃ and R₆ are independently H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -C(O)R₁₇, -OR₁₇, -SR₁₇, -NR₁₇R₁₈, -NR₁₉NR₁₇R₁₈, or -NR₁₇OR₁₈,

wherein R₁₇, R₁₈, and R₁₉ independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

or, R₃ and R₆, together with the carbon atom to which they are attached, form a cycloalkyl group or a heterocycloalkyl group;

R₇ is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR₁₇, -SR₁₇, -NR₁₇R₁₈, -NR₁₉NR₁₇R₁₈, or -NR₁₇OR₁₈,

wherein R₁₇, R₁₈, and R₁₉ independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

or R₇, together with R₃ or R₆ and the atoms to which they are attached, forms a heterocycloalkyl group;

R₂₀ is H, OH, or any suitable organic moiety; and

Z and Z₁ are independently H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -C(O)R₂₁, -CO₂R₂₁, -CN, -C(O)NR₂₁R₂₂, -C(O)NR₂₁OR₂₂, -C(S)R₂₁, -C(S)NR₂₁R₂₂, -NO₂, -SOR₂₁, -SO₂R₂₁, -SO₂NR₂₁R₂₂, -SO(NR₂₁)(OR₂₂), -SONR₂₁, -SO₃R₂₁, -PO(OR₂₁)₂, -PO(R₂₁)(R₂₂), -PO(NR₂₁R₂₂)(OR₂₃), PO(NR₂₁R₂₂)(NR₂₃R₂₄), -C(O)NR₂₁NR₂₂R₂₃, or -C(S)NR₂₁NR₂₂R₂₃,

wherein R₂₁, R₂₂, R₂₃, and R₂₄ are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group, or a thioacyl group, or wherein any two of R₂₁, R₂₂, R₂₃, and R₂₄, together with the atom(s) to which they are bonded, form a heterocycloalkyl group;

or Z₁, as defined above, together with R₁, as defined above, and the atoms to which Z₁ and R₁ are bonded, form a cycloalkyl or heterocycloalkyl group,

or Z and Z₁, both as defined above, together with the atoms to which they are

bonded, form a cycloalkyl or heterocycloalkyl group;
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof;
and wherein said compound, or pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof, has antipicornaviral activity with an EC_{50} less than or equal to 10 μ M in the HI-HeLa cell culture assay.

2. At least one compound of claim 1, wherein R_1 is H or F, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
3. At least one compound of claim 1, wherein R_{20} is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR₁₇, -SR₁₇, -NR₁₇R₁₈, -NR₁₉NR₁₇R₁₈, or -NR₁₇OR₁₈, wherein R_{17} , R_{18} , and R_{19} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
4. At least one compound of claim 3, wherein R_{20} is the alkyl group - C(R_{41})(R_{42})NR₄₃R₄₄, wherein:

R_{41} and R_{42} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group; and
 R_{43} and R_{44} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -NR₄₅R₄₆, -C(O)R₄₅, -C(S)R₄₅, -C(O)NR₄₅R₄₆, -C(S)NR₄₅R₄₆, -C(O)NR₄₅OR₄₆, -C(S)NR₄₅OR₄₆, -C(O)SR₄₅, -C(O)OR₄₅, -C(S)OR₄₅, -C(S)SR₄₅, -OR₄₅, -SR₄₅, -C(O)NR₄₅NR₄₆R₄₇, -C(S)NR₄₅NR₄₆R₄₇, -SOR₄₅, -SO₂R₄₅, -S(O)NR₄₅R₄₆, -S(O)NR₄₅(OR₄₆), -SO₂NR₄₅R₄₆, -SO₂NR₄₅(OR₄₆), or -SO₃R₄₅,

wherein R_{45} , R_{46} , and R_{47} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,

or wherein any suitable combination of R_{41} , R_{42} , R_{43} , and R_{44} together form a cycloalkyl group or a heterocycloalkyl group;

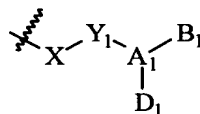
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

5. At least one compound of claim 4, wherein at least one of R_{43} or R_{44} is -C(O)SR₄₅ or -C(O)OR₄₅, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

6. At least one compound of claim 5, wherein R_{45} is an alkyl group, a cycloalkyl group, an aryl group, a heterocycloalkyl group, or a heteroaryl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

7. At least one compound of claim 6, wherein R_{45} is a C₁-C₁₀ alkyl group or a cycloalkyl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

8. At least one compound of claim 1, wherein at least one of R_2 or R_5 is



or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

9. At least one compound according to claim 8, wherein D_1 is -OR₂₅, =O, =S, ≡N, =NR₂₅, or -NR₂₅R₂₆, wherein R_{25} and R_{26} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the nitrogen atom to which they are bonded, form a

heterocycloalkyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

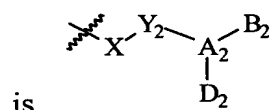
10. At least one compound according to claim 9, wherein D₁ is =O; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

11. At least one compound according to claim 8, wherein A₁ is C, CH, S, or S(O); or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

12. At least one compound according to claim 11, wherein A₁ is C; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

13. At least one compound according to claim 8, wherein B₁ is NR₁₇R₁₈, wherein R₁₇ and R₁₈ are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

14. At least one compound according to claim 1, wherein at least one of R₂ or R₅



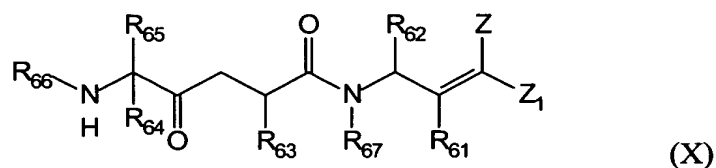
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

15. At least one compound according to claim 14, wherein D₂ is -OR₂₅, =O, =S, =N, =NR₂₅, or -NR₂₅R₂₆, wherein R₂₅ and R₂₆ are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom(s) to which they are bonded, form a heterocycloalkyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

16. At least one compound according to claim 15, wherein D₂ is =O; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
17. At least one compound according to claim 14, wherein A₂ is C, CH, S, or S(O); or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
18. At least one compound according to claim 17, wherein A₂ is C; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
19. At least one compound according to claim 14, wherein B₂ is -NR₁₇R₁₈, wherein R₁₇ and R₁₈ are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
20. At least one compound according to claim 1, wherein A₁ is C, CH, S, or S(O) or wherein A₂ is C, CH, S, or S(O); or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.
21. At least one compound according to claim 1, wherein Z and Z₁ are independently H, an aryl group, or a heteroaryl group, -C(O)R₂₁, -CO₂R₂₁, -CN, -C(O)NR₂₁R₂₂, -C(O)NR₂₁OR₂₂, -C(S)R₂₁, -C(S)NR₂₁R₂₂, -NO₂, -SOR₂₁, -SO₂R₂₁, -SO₂NR₂₁R₂₂, -SO(NR₂₁)(OR₂₂), -SONR₂₁, -SO₃R₂₁, -C(O)NR₂₁NR₂₂R₂₃, or -C(S)NR₂₁NR₂₂R₂₃;
- wherein R₂₁, R₂₂, and R₂₃ are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group, or a thioacyl group, or wherein any two of R₂₁, R₂₂, and R₂₃, together with the atom(s) to which they are bonded, form a heterocycloalkyl group;
- or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

22. At least one compound according to claim 1, wherein M is O.

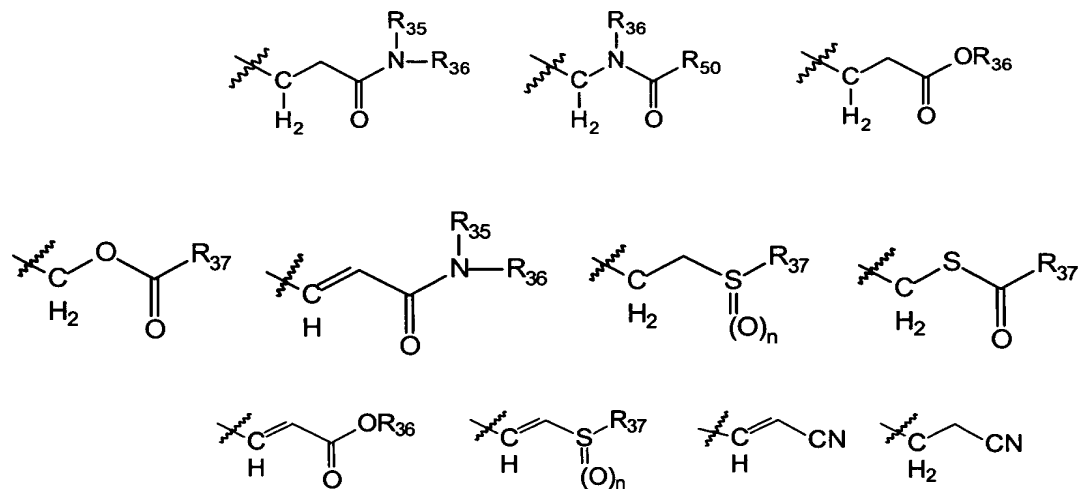
23. At least one compound having the formula X:



wherein

R₆₁ is H, F, or an alkyl group;

R₆₂ is selected from one of the following moieties:



wherein

R₃₅ is H, an alkyl group, an aryl group, -OR₃₈, or -NR₃₈R₃₉,

wherein R₃₈ and R₃₉ independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group; and

R₃₆ is H or an alkyl group,

or R₃₅ and R₃₆, together with the nitrogen atom to which they are attached,

form a heterocycloalkyl group or a heteroaryl group;

R₃₇ is an alkyl group, an aryl group, or -NR₃₈R₃₉, wherein R₃₈ and R₃₉ are as defined above;

R₅₀ is H, an alkyl group, an aryl group, -OR₃₈, -SR₃₉, -NR₃₈R₃₉, -NR₄₀NR₃₈R₃₉, or

-NR₃₈OR₃₉, or R₅₀ and R₃₆, together with the atoms to which they are attached, form a heterocycloalkyl group;

wherein R₃₈ and R₃₉ are as defined above, and R₄₀ is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group; and

n is 0, 1, or 2;

R₆₃ is H or an alkyl group;

R₆₄ is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group;

R₆₅ is H or an alkyl group;

R₆₆ is H, an acyl group, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a sulfonyl group, or a heteroaryl group;

R₆₇ is H or an alkyl group;

and

Z and Z₁ are independently H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -C(O)R₂₁, -CO₂R₂₁, -CN, -C(O)NR₂₁R₂₂, -C(O)NR₂₁OR₂₂, -C(S)R₂₁, -C(S)NR₂₁R₂₂, -NO₂, -SOR₂₁, -SO₂R₂₁, -SO₂NR₂₁R₂₂, -SO(NR₂₁)(OR₂₂), -SONR₂₁, -SO₃R₂₁, -PO(OR₂₁)₂, -PO(R₂₁)(R₂₂), -PO(NR₂₁R₂₂)(OR₂₃), -PO(NR₂₁R₂₂)(NR₂₃R₂₄), -

$C(O)NR_{21}NR_{22}R_{23}$, or $-C(S)NR_{21}NR_{22}R_{23}$,

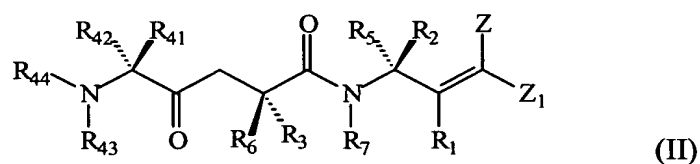
wherein R_{21} , R_{22} , R_{23} , and R_{24} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group, or a thioacyl group, or wherein any two of R_{21} , R_{22} , R_{23} , and R_{24} , together with the atom(s) to which they are bonded, form a heterocycloalkyl group,

or Z and Z_1 , both as defined above, together with the atoms to which they are bonded, form a heterocycloalkyl group;

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

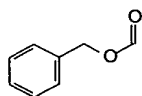
24. At least one compound according to claim 23, wherein R_{66} is the acyl group $-C(O)OR_{68}$ or the acyl group $-C(O)SR_{68}$, wherein R_{68} is an alkyl group, a cycloalkyl group, an aryl group, a heterocycloalkyl group, or a heteroaryl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

25. At least one compound according to claim 4, having the formula II:

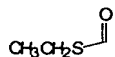


wherein R_1 , R_5 , R_6 , R_7 , R_{42} , R_{43} , and Z are H, R_2 is $CH_2CH_2C(O)NH_2$, and

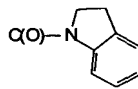
R_3 is CH_2Ph , R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is



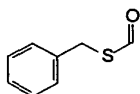
R_3 is CH_2Ph , R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is



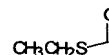
R_3 is CH_2Ph , R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$, Z_1 is



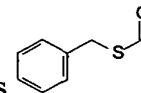
, and R_{44} is



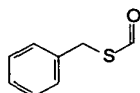
R_3 is CH_2Ph , R_{41} is $\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is



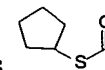
R_3 is CH_2Ph , R_{41} is $\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is



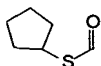
R_3 is CH_2Ph , R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is



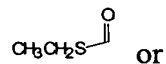
R_3 is CH_2Ph , R_{41} is $\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is



R_3 is CH_2Ph , R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is

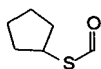


R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, R_{41} is $\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is



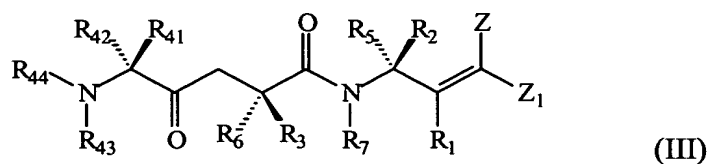
or

R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, R_{41} is $\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is

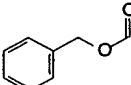


or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

26. At least one compound according to claim 4, having the formula III:

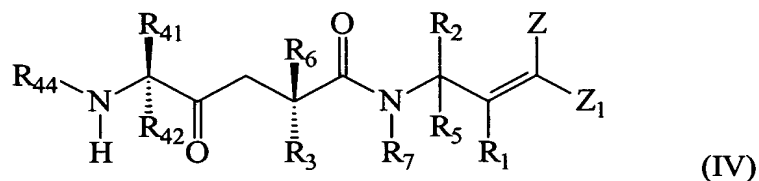


wherein R_1 , R_5 , R_6 , R_7 , R_{42} , R_{43} , and Z are H, R_3 is CH_2Ph , R_2 is $\text{CH}_2\text{CH}_2\text{C}(\text{O})\text{NH}_2$,

R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is 

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

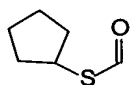
27. At least one compound of the formula (IV):



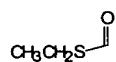
wherein:

R_1 , R_5 , R_6 , R_7 , and R_{42} are H, R_2 is $\text{CH}_2\text{CH}_2\text{C}(\text{O})\text{NH}_2$, and

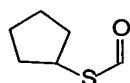
R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is CH_2Ph , and R_{44} is



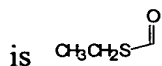
R_3 is $\text{CH}_2(p\text{-F})\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44} is



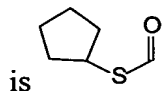
R_3 is $\text{CH}_2(p\text{-F})\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44} is

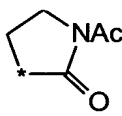


R_3 is $\text{CH}_2(p\text{-CF}_3)\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44}



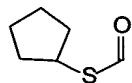
R_3 is $\text{CH}_2(p\text{-CF}_3)\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44}



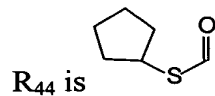
R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, Z and Z_1 together form  (where * indicates the point of attachment and the carbonyl group is cis to the R_1 group), R_{41} is



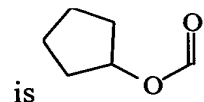
R_3 is $\text{CH}_2(p\text{-F})\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is CH_2Ph , and R_{44} is



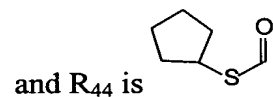
R_3 is $\text{CH}_2(p\text{-F})\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$, and



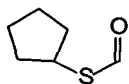
R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44}



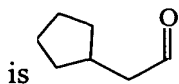
R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$,



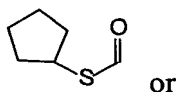
R_3 is CH_2Ph , Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{C}(\text{CH}_3)_3$, and R_{44} is



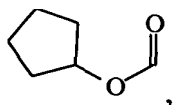
R_3 is $\text{CH}_2(p\text{-CH}_3)\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44}



R_3 is $\text{CH}_2(p\text{-F})\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is cyclohexyl, and R_{44} is

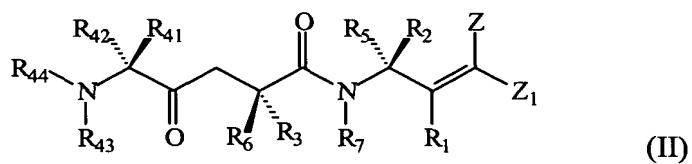


R_3 is $\text{CH}_2(p\text{-F})\text{Ph}$, Z is H, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, R_{41} is $\text{CH}(\text{CH}_3)_2$, and R_{44} is

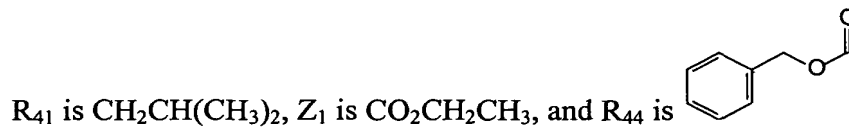


or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

28. A composition comprising at least one compound of formula II:

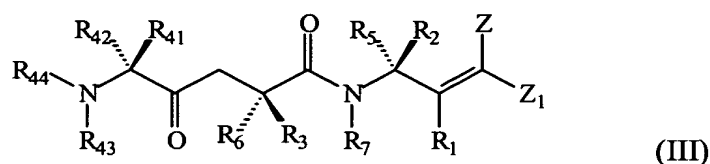


wherein R_1 , R_5 , R_6 , R_7 , R_{42} , R_{43} , and Z are H, R_3 is CH_2Ph , R_2 is $\text{CH}_2\text{CH}_2\text{C}(\text{O})\text{NH}_2$,

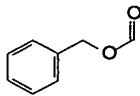


or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof,

and at least one compound of formula III:



wherein R_1 , R_5 , R_6 , R_7 , R_{42} , R_{43} , and Z are H, R_3 is CH_2Ph , R_2 is $\text{CH}_2\text{CH}_2\text{C}(\text{O})\text{NH}_2$,

R_{41} is $\text{CH}_2\text{CH}(\text{CH}_3)_2$, Z_1 is $\text{CO}_2\text{CH}_2\text{CH}_3$, and R_{44} is 

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

29. A pharmaceutical composition comprising:

- (a) a therapeutically effective amount of at least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof; and
- (b) a pharmaceutically acceptable carrier, diluent, vehicle, or excipient.

30. A method of treating a mammalian disease condition mediated by picornaviral protease activity that comprises administering to a mammal in need thereof a therapeutically effective amount of at least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

31. A method of inhibiting the activity of a picornaviral 3C protease that comprises contacting the picornaviral 3C protease with an effective amount of at

least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

32. A method of inhibiting the activity of a rhinoviral protease that comprises contacting the rhinoviral protease with an effective amount of at least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

33. A compound according to claim 1, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof, wherein said antipicornaviral activity is antirhinoviral activity.

34. A compound according to claim 1, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof, wherein said antipicornaviral activity is anticoxsackieviral activity.